

polyoxyethylenenonylphenyl ether, polyoxyethylene fatty acid ester or sucrose fatty acid ester.

11. (New) The artificial chaperon kit of Claim 9, wherein the cyclic saccharide cycloamylose has a polymerization degree of from 25 to 50

12. (New) The artificial chaperon kit of Claim 9, wherein the cyclic saccharide cycloamylose has a polymerization degree of from 40 to 150.

13. (New) An artificial chaperon kit comprising a cyclic saccharide cycloamylose having a polymerization degree of from 25 to 50 or 40 to 150. and an ionic detergent.

A1
14. (New) The artificial chaperon kit of Claim 13, wherein the ionic detergent is cetyltrimethylammonium bromide, sodium dodecyl sulfate, sodium deoxycholate, 3-[(3-colamidopropyl)dimethylammonio]-1-propanesulfonic acid, hexadecyltrimethylammonium bromide or myristylsulfobetaine.

15. (New) The artificial chaperon kit of Claim 13, wherein the cyclic saccharide cycloamylose has a polymerization degree of from 25 to 50.

16. (New) The artificial chaperon kit of Claim 13, wherein the cyclic saccharide cycloamylose has a polymerization degree of from 40 to 150.

17. (New) A method of refolding a denatured protein, comprising:
contacting a polyoxyethylenic detergent with a denatured protein, followed by
contacting the protein with a cyclic saccharide cycloamylose having a degree of
polymerization of 25 to 50 or 40 to 150, to produce a folded protein.

18. (New) The method of Claim 17, wherein the polyoxyethylenic detergent is a
polyoxyethylenesorbitan ester, polyoxyethylenedodecyl ether,
polyoxyethyleneheptamethylhexyl ether, polyoxyethyleneisooctylphenyl ether,

polyoxyethylenenonylphenyl ether, polyoxyethylene fatty acid ester or sucrose fatty acid ester.

19. (New) The method of Claim 17, wherein the cyclic saccharide cycloamylose has a polymerization degree of from 25 to 50

20. (New) The method of Claim 17, wherein the cyclic saccharide cycloamylose has a polymerization degree of from 40 to 150.

21. (New) The method of Claim 17, wherein the folded protein has an α -helical structure.

22. (New) The method of Claim 17, wherein the folded protein has an β -sheet structure.

23. (New) The method of Claim 17, wherein the protein has an intramolecular S-S bond.

A1
24. (New) A method of refolding a denatured protein, comprising:
contacting an ionic detergent with a denatured protein, followed by
contacting the protein with a cyclic saccharide cycloamylose having a degree of
polymerization of 25 to 50 or 40 to 150, to produce a folded protein.

25. (New) The method of Claim 24, wherein the ionic detergent is
cetyltrimethylammonium bromide, sodium dodecyl sulfate, sodium deoxycholate, 3-[(3-
colamidopropyl)dimethylammonio]-1-propanesulfonic acid, hexadecyltrimethylammonium
bromide or myristylsulfobetaine.

26. (New) The method of Claim 24, wherein the cyclic saccharide cycloamylose has
a polymerization degree of from 25 to 50.

27. (New) The method of Claim 24, wherein the cyclic saccharide cycloamylose has
a polymerization degree of from 40 to 150.

28. (New) The method of Claim 24, wherein the folded protein has an α -helical structure.

A 29. (New) The method of Claim 24, wherein the folded protein has an β -sheet structure.

30. (New) The method of Claim 24, wherein the protein has an intramolecular S-S bond.--

SUPPORT FOR THE AMENDMENTS

Newly added Claims 9-30 are supported by the specification at pages 4-25 and by original Claims 1-8. No new matter is believed to have been added to this application by these amendments.

REMARKS

Claims 9-30 are active in this application. Favorable reconsideration is respectfully requested.

The present invention relates to an artificial chaperon kit comprising (a) a cyclic saccharide cycloamylose having a degree of polymerization of 25 to 50 or 40 to 150 and (b) a polyoxyethylenic detergent. See Claim 9.

The present invention also relates to an artificial chaperon kit comprising a cyclic saccharide cycloamylose having a polymerization degree of from 25 to 50 or 40 to 150 and an ionic detergent. See Claim 13.

The present invention also relates to a method of refolding a denatured protein, comprising:

contacting a polyoxyethylenic detergent with a denatured protein, followed by